



# Severe Weather Awareness Week



**April 30<sup>th</sup> to May 6<sup>th</sup>, 2017**

## **Weather-Ready Nation**

Kat Hawley  
NOAA's National Weather Service  
Binghamton NY

# "Average" Year and Trends in the U.S.



**650 Deaths**  
**15B in Losses**



**26,000 Severe**  
**Thunderstorms**



**6 Atlantic Basin**  
**Hurricanes**

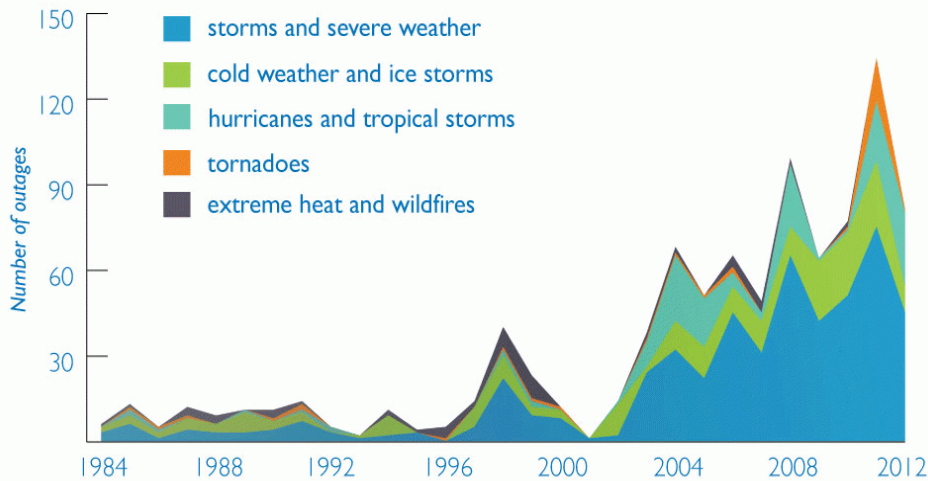


**1,300 Tornadoes**



**5,000 Floods**

**Extreme Weather Is Causing More Major Power Outages**  
(major = at least 50,000 customers affected)

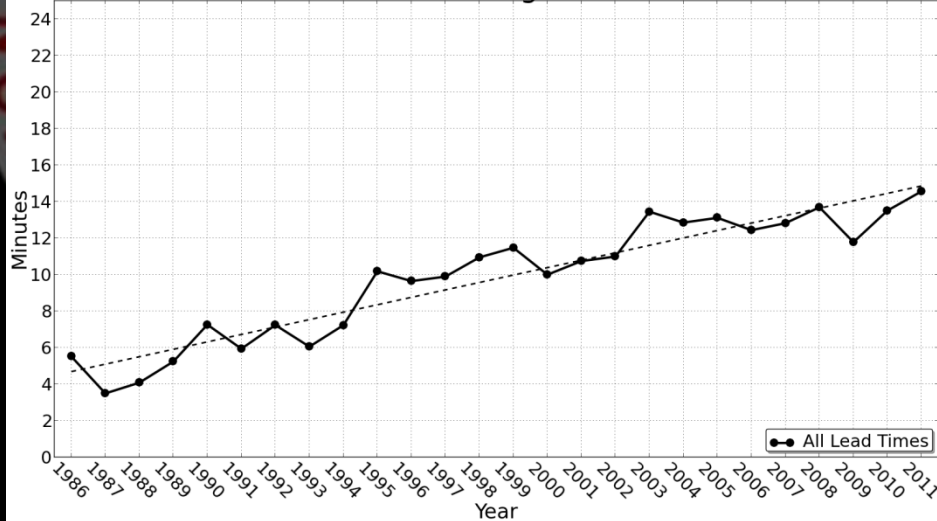


CLIMATE CO CENTRAL

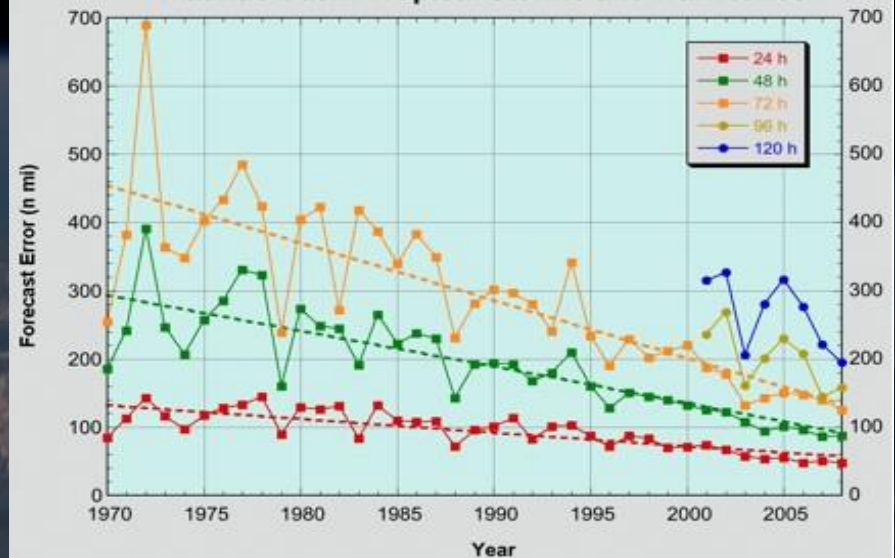
**Regardless of the cause,  
the trend shows an  
increasing number of  
extreme weather events  
at increasing cost to the  
nation.**

# While the NWS has Improving Forecasts

Tornado Warning Lead Time



NHC Official Annual Average Track Errors  
Atlantic Basin Tropical Storms and Hurricanes





# Societal Impacts Tell a Different Story



Looking west-northwest from Virginia Tech's Stadium as lightning strikes at a distance of 0.6 miles. The strike occurred at 8:50 P.M. on Aug 27, 2000, moments before the opening kickoff (courtesy of the Roanoke Times 2000).





# Extreme Events Are Well Forecasted For But...

April 28-29<sup>th</sup> 2011: Deadliest outbreak since 1932  
~190 tornadoes ~311 fatalities

## Sandy

- 138 fatalities
- **ONLY 34%** residents along the NJ coast evacuated!!

120 hour Forecast

72 hour Forecast

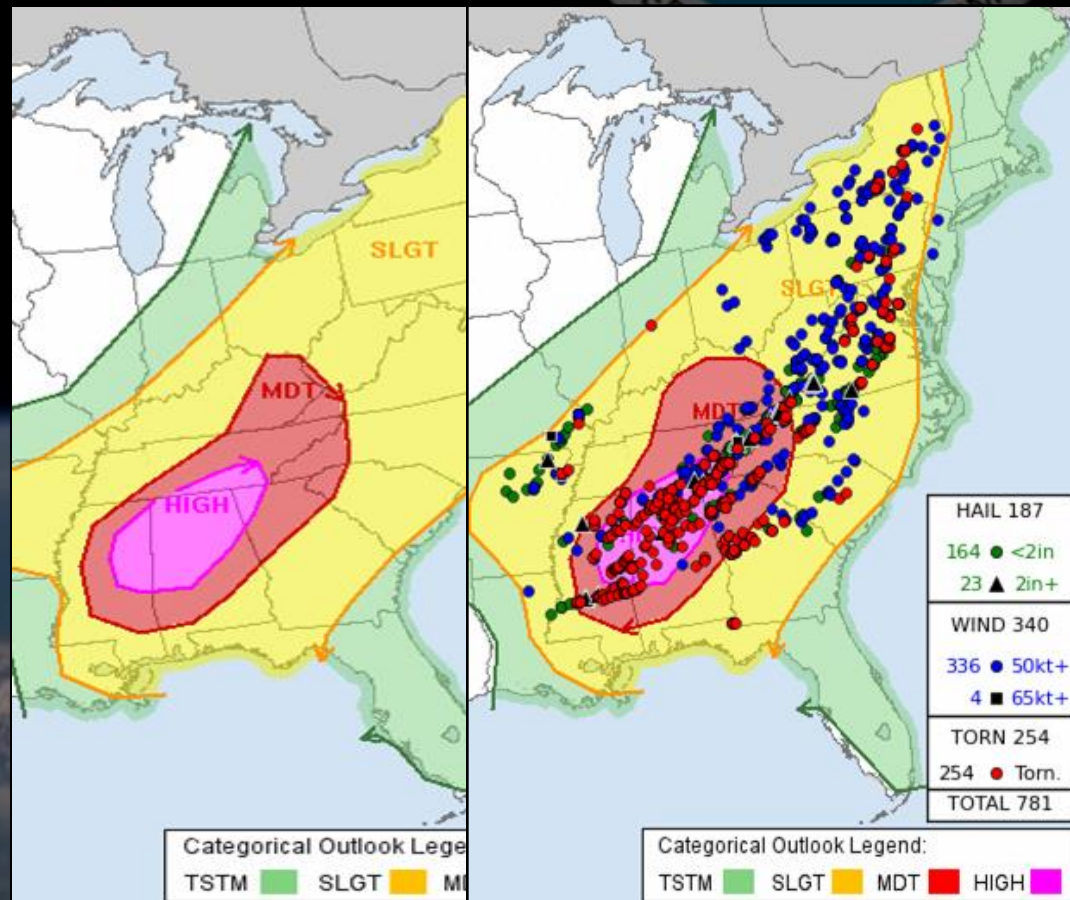
### NHC Forecast Tracks & Cone of Uncertainty for Sandy

Issuance Time in EDT

Thursday, Oct. 25 (11 PM)

Saturday, Oct. 27 (2 PM)

☆ Landfall Location



# **We NEED YOU!**

## **To Help Us Build A Weather-Ready Nation.**

**We need YOU to help build a Weather-Ready Nation (WRN). By building a WRN, you can help change the way America responds to disasters.**

**Building a WRN requires action from America's Weather Industry, local and state emergency managers, researchers, the media, local schools, nonprofits and businesses.**

**Join us in engaging your local community to make this country responsive and resilient to all weather events and become an Weather-Ready Nation Ambassador!**





# What are the Duties of a WRN Ambassador?

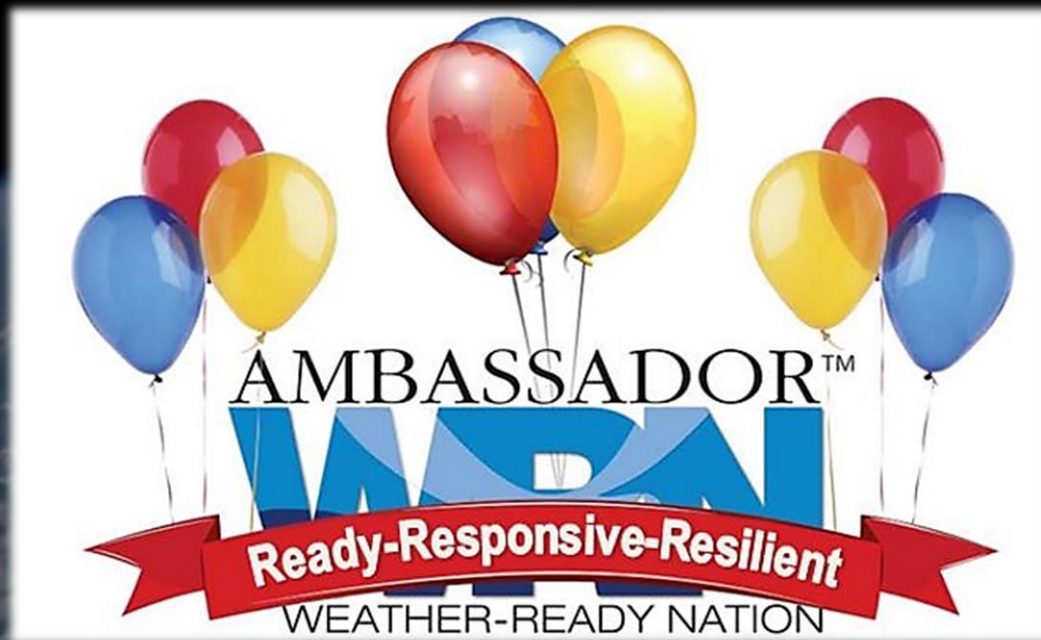
- **Maintain active dialog with your local NOAA representative**
- **Disseminate appropriate NOAA-generated information such as preparedness messages, and identify opportunities for collaboration including research initiatives and outreach events.**
- **Attend annual SKYWARN classes**
- **Become an active member in your community promoting weather safety and preparedness**



# How can I become a Weather-Ready Nation Ambassador?

Go Here:

[http://www.nws.noaa.gov/com/weatherreadynation/amb\\_tou.html](http://www.nws.noaa.gov/com/weatherreadynation/amb_tou.html)





# Where Can I find Weather Information To Promote Weather Safety and Preparedness?

<http://weather.gov/bgm>

<http://weather.gov/buf>

<http://weather.gov/aly>

<http://weather.gov/okx>

[http://www.nws.noaa.gov/com/weatherreadynation/summer\\_safety.html](http://www.nws.noaa.gov/com/weatherreadynation/summer_safety.html)

<http://www.nws.noaa.gov/com/weatherreadynation/>

# WATCH vs. WARNING

## CAUTION

- **Check the forecast often**
- **Monitor the skies**
- **Know where to take shelter**

## DANGER

- **Take shelter immediately!**
- **Seek further information**
- **Monitor the forecast**

## Watch- "Be Prepared"

Conditions are favorable for severe weather in or near the watch area. Watches are issued for tornadoes, severe thunderstorms and flash floods.

## Warning- "Take Action"

The severe weather event is imminent or occurring in the warned area. Warnings are issued for tornadoes, severe thunderstorms, flash floods and river flooding. Issued by NWS Binghamton for central New York and northeast Pennsylvania.